

ABSTRACT OF THE DISCLOSURE

A light is irradiated on a wafer on which a plurality of cells are formed. Each cell includes a plurality of pixels. A gray level on each pixel is formed for every cell by sensing the light reflected from the wafer surface. The gray level of the killer defect can be formed by observing the wafer. The gray level of the killer defect is then respectively compared with the gray level on each pixel. The pixel having the gray level corresponding to that of the killer defect is checked to be defective. Therefore, the killer defect can be distinguished from the non-killer defects. As a result, the killer defect can be detected promptly and accurately, increasing the throughput.